

NASCIO 2010 Recognition Award Nomination

Title: Electronic Commerce Task Force Study and Enterprise Implementation

Category: Cross-Boundary Collaboration and Partnerships

State: North Carolina



Prepared by: NC Office of the State Controller

Project Manager: David C. Reavis, Director of E-Commerce Initiatives

June 2, 2010



Executive Summary

In 2007, the NC Office of the State Controller (NCOSC) was charged by the State Legislature with the task of evaluating the opportunities for efficiencies in state government through the use of electronic commerce, as it relates to both disbursement and collection of funds. The mandate required the NCOSC to acquire input from various sectors of state government, including some 35 general government agencies, 16 universities, 58 community colleges, 112 local public school systems, and the State Office of Information Technology Services.

Because of the decentralized organizational structure of North Carolina state government, and because of the diverse systems belonging to the cross section of stakeholders to be examined, it was recognized that the success of the project would depend heavily upon establishing a methodology that involved a high level of collaboration across the government sector boundaries. Not only would there be input from the government sectors, but input would be needed from the various central oversight agencies. In addition, best practices performed by other states and various e-commerce service providers would need to be examined.

The mandate was accomplished by the creation of an Electronic Commerce Task Force representing the various government sectors, as well as a combination of both business users and IT subject matter experts. A unique methodology utilized by the group of 15 subject matter experts was a “members only” portal that facilitated the various research and communication tools employed by the group, and provided for a repository of data and reports generated through the research.

The Task Force produced a report that primarily performed an assessment of the State’s current e-commerce environment, identified best practices of other states, examined various issues, and made recommendations for strategic planning to maximize the utilization of e-commerce across all government sectors. The recommendations related to goals to improve governance, policies, business processes, leveraging statewide enterprise services and outsourced contracted vendors. During FY 2008-2009 and into 2010, NCOSC, functioning as the lead state agency, implemented many of the recommendations identified in the Task Force Report. The initiatives included leveraging services available through several enterprise contracts with e-commerce service providers and developing policies and processes relating to emerging/evolving industry requirements, including the PCI Data Security standard and the International ACH Transaction (IAT) rules.

Benefits accruing from the Task Force efforts have allowed the various government entities in the State to leverage the statewide enterprise structure developed by the NCOSC. Additionally, the entities were afforded defensible due diligence processes and procedures to be in compliance with the changes in industry requirements that emerged in 2009. These efforts were evidenced by the National Automated Clearing House Association (NACHA) recognizing the standards promulgated by the NCOSC as a model for other states to emulate in order to ensure that electronic payments are in compliance with the US Treasury’s Office of Foreign Assets Control (OFAC).

Description

Business problem

For the most part, only a few state agencies had been very successful in implementing e-commerce programs since the beginning of the 21st century. In the area of disbursements, direct deposit of payroll and retirement benefits had been the most successful programs. In the area of receipts, the collection of taxes electronically had been the most successful. A few agencies had developed online systems for citizens to easily submit payments that may be due the State (e.g., DMV Registration, Secretary of State, Department of Revenue, DHHS Child Support, Employment Security Commission, Wildlife Resources, and several universities). Beyond these major programs, however, the degree of success obtained by the various agencies had varied from moderate to none at all.

An assessment of the State's current e-commerce program indicated that the statewide enterprise structure that was first envisioned by a 1998 E-Commerce Work Group had not been fully developed. The various agencies, universities, and community colleges had all embarked down the road of e-commerce on rather separate courses, each developing their own systems for capturing transactions. While most used the master contracts established by the NC Office of the State Controller (NCOSC), and some used the Common Payment Service provided by the Office of Information Technology Services (ITS), for the most part, each agency operated differently in regards to how they had implemented their individual e-commerce programs.

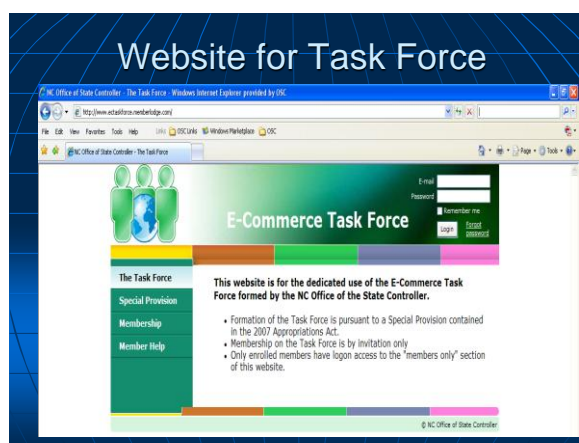
Recognizing the fractured structure of state government and the separate statutory authority agencies operate under as barriers and challenges to be overcome, statewide enterprise programs that may be developed must be structured in such a manner to accommodate the variety of operational needs unique to each government sector (general government, university, and community college), and to each entity within that sector. It was recognized that a more coordinated approach needed to be established to provide an ongoing function within the state government environment to ensure a strong and effective system for the orderly expansion of the utilization of e-commerce activity, incorporating statutory and industry regulatory requirements and emerging best practices.

One of the prioritized goals was for any program developed to afford the individual agencies the opportunity to leverage centrally managed statewide enterprise arrangements with service providers. Management's decision to proceed with an enterprise approach -- instead of an individualized solutions approach -- was based partly on the desire to follow industry best practices, as well as to ultimately provide cost effective benefits to the citizens, including expansion of available online services.

Solution – Task Force Creation

In 2007, the NC Office of the State Controller (NCOSC) was charged by the State Legislature with the task of evaluating the opportunities for efficiencies in state government through the use of electronic commerce, as it relates to both disbursement and collection of funds. The mandate required the NCOSC to acquire input from various sectors of state government, including some 35 general government agencies, 16 universities, 58 community colleges, 112 local public school systems, and the State Office of Information Technology Services. The NCOSC was to report back to the General Assembly with its findings and recommendations.

The mandate was accomplished by the creation of an Electronic Commerce Task Force representing the various government sectors, as well as a combination of both business users and IT subject matter experts. A unique methodology utilized by the 15 member group was a “members only” portal that facilitated the various research and communication tools employed by the group, and provided for a repository of data and reports generated through their research activities.



The major objectives of the Task Force were to:

- Ascertain the current transaction volumes of electronic payments versus paper transactions, both receipts and disbursements
- Identify agencies and programs that have developed successful programs
- Identify reasons and obstacles for lack of e-commerce participation
- Identify current costs of e-commerce activities
- Identify the various types of agency activities suitable for e-commerce
- Identify best practices in e-commerce
- Identify security and industry related issues applicable to governments
- Identify current roles of central agencies
- Identify inefficiencies in current operations
- Identify what services could/should be offered on an enterprise basis
- Identify various statutes pertaining to e-commerce and modifications needed

The Task Force phase of the project lasted from September 2007 through April 2008.

Associated with the Task Force creation were two subsequent components, both resulting from recommendations of the Task Force, and discussed below.

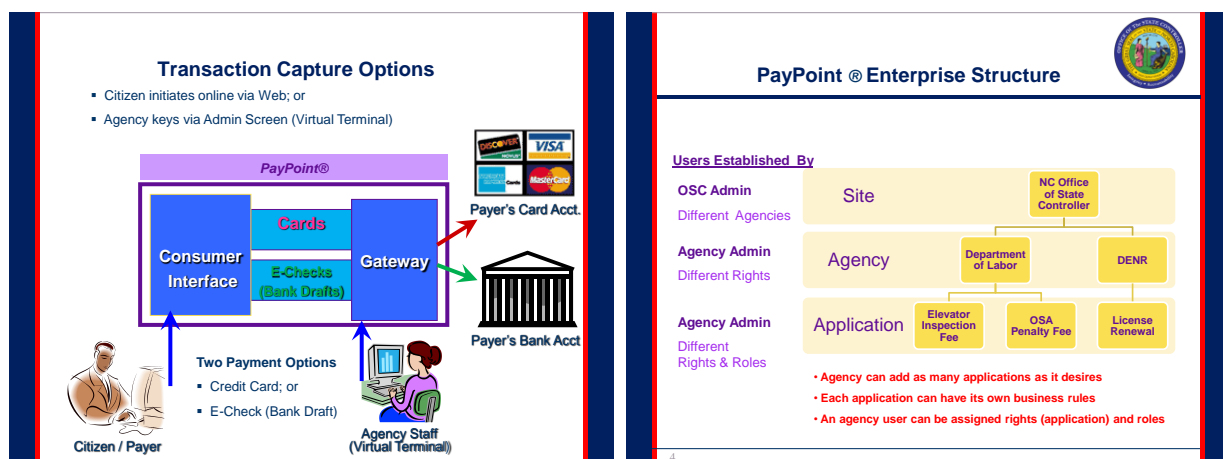
Solution Component – Expansion of Statewide Enterprise Arrangements

Part of the solution for a more efficient e-commerce program that was identified by the Task Force was an affirmation to continue the expansion of statewide enterprise solutions, while at the same time recognizing that there are cases where individualized solutions are needed for specific governmental entities. Enterprise solutions would allow the agencies to take advantage of the leveraging benefits provided by such arrangements. Five enterprise solutions were identified that each required arrangements with a service provider:

- EFT Transaction Processing Services
- Merchant Card Processing Services
- PCI Data Security Validation Services
- State operated Payment Gateway Service
- Third-party operated Consumer Payment Gateway Service

The first four enterprise service solutions already existed, but needed expansion. The absence of the fourth enterprise service solution, a gateway solution that included a web consumer interface, was deemed to be the major gap in the State's E-Commerce program offering. Beginning in July 2008, the NCOSC initiated the steps to research the various options and to obtain such a service.

The effort culminated in March 2009 with the execution of a contract amendment with First Data Government Solutions to add the consumer gateway service known as "PayPoint®" to the services offering available to the various agencies. The NC Department of Labor piloted the PayPoint® program from April through June, and the official roll-out began in July 2009.



PayPoint® is suitable for an agency that desires to accept payments online (either cards or E-Checks), but does not have the internal resources and/or expertise to develop a comprehensive in-house web capture application.

Solution Component – Policies for Industry Compliance Requirements

There were two major industry compliance requirements during the 2008-2009 timeframe that impacted agencies involved in e-commerce activities. They were the Payment Card Industry Data Security Standard (PCI DSS) and the International ACH Transaction (IAT) Rules. The IAT Rules, issued by the National Automated Clearing House Association (NACHA) effective September 2009, required compliance with regulations issued by the US Treasury Department's Office of Foreign Assets Control (OFAC). Policies and advisories issued by the NCOSC, in conjunction with the E-Commerce Program, afforded the various agencies defensible due diligence processes and procedures to be in compliance with the requirements.

Significance

The significance of the E-Commerce Task Force project is evidenced by the impact of the findings and resulting program implementations on the various beneficiary stakeholders, as well as the recognition received from two major federal agencies, the banking industry, and other states.

The primary stakeholders were the 35 general government agencies, 16 universities, 58 community colleges, and 112 local public school systems. Providing the entities with enterprise solutions and standardization of policies and processes has allowed resources that are not typically affordable to individual organizations to be made available to all the governmental entities on a cross-boundary basis.

The project also received national recognition. For example, the National Automated Clearing House Association (NACHA) endorsed the standards promulgated by the NCOSC as a model for other states to emulate in order to ensure that electronic payments are in compliance with the US Treasury's Office of Foreign Assets Control (OFAC), more specifically the International ACH Transaction (IAT) Rules. Additionally, the Federal Reserve Bank of Richmond recognized the NCOSC's E-Commerce program and its efforts regarding IAT in its publication, *Fifth District Business and Consumer Payments Advisory Councils Fall 2009 Report*.

The project reflected alignment with six of the 10 NASCIO 2010 state CIO's priorities:

- Budget and Cost Control – Cost savings strategies for enterprise arrangements
- Consolidation – Centralization of services offered by payment service providers
- Shared Services – Central management and resources provided by NCOSC
- Security – Providing a solution for validation compliance with PCI Data security
- Infrastructure – Providing both a state-operated and a third-party gateway service
- Governance – Developing policies to ensure compliance with both payment industry requirements and IT best practices and integration

While the utilization of “enterprise services” is not necessarily an innovative approach found in the IT sector, the NCOSC’s methodology of developing its E-Commerce Program is. The establishment of the Task Force and the unique utilization of the portal used by the Task Force to perform its research and communications are considered innovative. The resulting operational efficiencies and effectiveness are demonstrated in the collaboration that ensued, the increased productivity that accrued to the agencies, the reduction of risk associated with the processing of credit cards, the educational and training opportunities provided to the stakeholders, and most importantly, the additional channels of payment services made available to the citizens of the State in a cost effective manner.

Benefits

Benefits associated with the Task Force are primarily those related to the two resulting components, the expansion of the statewide enterprise arrangements and the policies for industry requirements compliance. While most of the benefits from the project will be recognized in the coming years, there are some benefits that were recognized almost immediately. Two immediate benefits were:

- Availability of a consumer payments capture solution for the Department of Labor. The PayPoint® solution was made available to the pilot agency, the NC Department of Labor (NCDOL), in the spring of 2009, with citizens able to begin making online payments in July 2009.
- State’s timely compliance with IAT Rules. States were caught off-guard with the newly implemented International ACH (IAT) Rules required by OFAC effective September 2009. The NCOSC’s timely development of a policy and processes for state governments to comply with the rules became an NACHA endorsed model for all 50 states to emulate.

Both of these benefits demonstrated “transferability” of applications, one to other agencies within North Carolina and one to other states across the nation.

Long-term quantitative benefits were and are anticipated. In the area of cost savings, leveraging the utilization of contracts with service providers on an enterprise basis revealed a notable reduction in “per transaction” costs for electronic payments:

Transaction	Without Enterprise Contract	With Enterprise Contract	Per Trans. Savings	Annualized Savings
EFT payments	\$.08	.01	\$.07	\$ 500,000
Card payments	\$.10	.04	\$.06	\$ 400,000
Total Annual Savings – Actual				\$ 900,000
Five-Year Savings - Anticipated				\$4.5 million

There are also cost avoidance benefits associated with risk mitigation, which are difficult to quantify. The avoidance of potential non-compliance fines associated with PCI Data Security and OFAC requirements (potential in the \$ millions) are the most notable.